

**DATE PRESENTING CLINICAL SIGNS**

2/7/2022

History: Presented 2/4/22 distended abdomen. Occasional vomiting, diarrhea.

**PATIENT**

Angus Landolf

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

Chihuahua

**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth.

The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Male, neutered

The prostate is normal in size (0.54 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**AGE**

1/1/2012

The left kidney is normal size (3.64 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. An ill-defined hyperechoic medullary band is observed at the corticomedullary junction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

9.5 lbs.

The right kidney is normal size (3.58 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. An ill-defined hyperechoic medullary band is observed at the corticomedullary junction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastrò, DVM,  
 Diplomate ACVIM  
 (Small Animal Internal  
 Medicine)

**Adrenal Glands**

The left adrenal gland is upper limits of normal size (0.60 cm at cranial pole) (0.56 cm at caudal pole) (1.80 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Padonia VH

The right adrenal gland is normal size (0.60 cm at cranial pole) (0.50 cm at caudal pole) (1.30 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Youssef

**Spleen**

The spleen is normal in size (1.20 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**INVOICE**

12965

**Liver**

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The

gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### ***Pancreas***

The left limb and base of the pancreas are prominent in size with minimal deviation from the normal peripheral contours. The parenchyma is slightly hypoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

### ***Free Abdomen***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely in this patient.
- The pancreatic changes may be a normal variant for this patient or could be consistent with mild, chronic pancreatitis. Correlation with clinical findings is recommended.
- Minor degenerative renal changes.

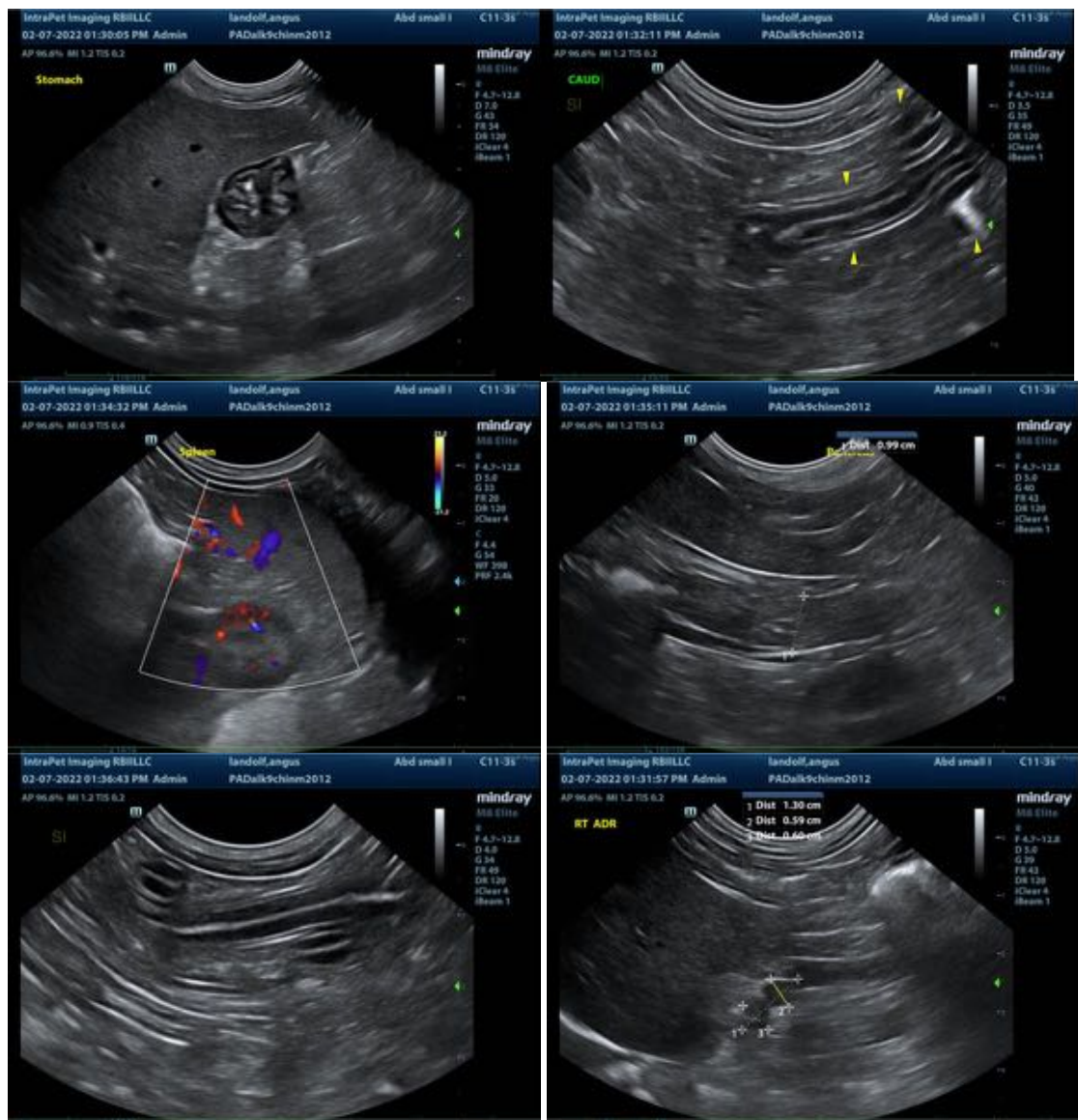
\*An obvious cause for the patient's clinical signs is not identified in this study. Differentials include microscopic gastrointestinal disease, low-grade pancreatitis, underlying metabolic issue, other.

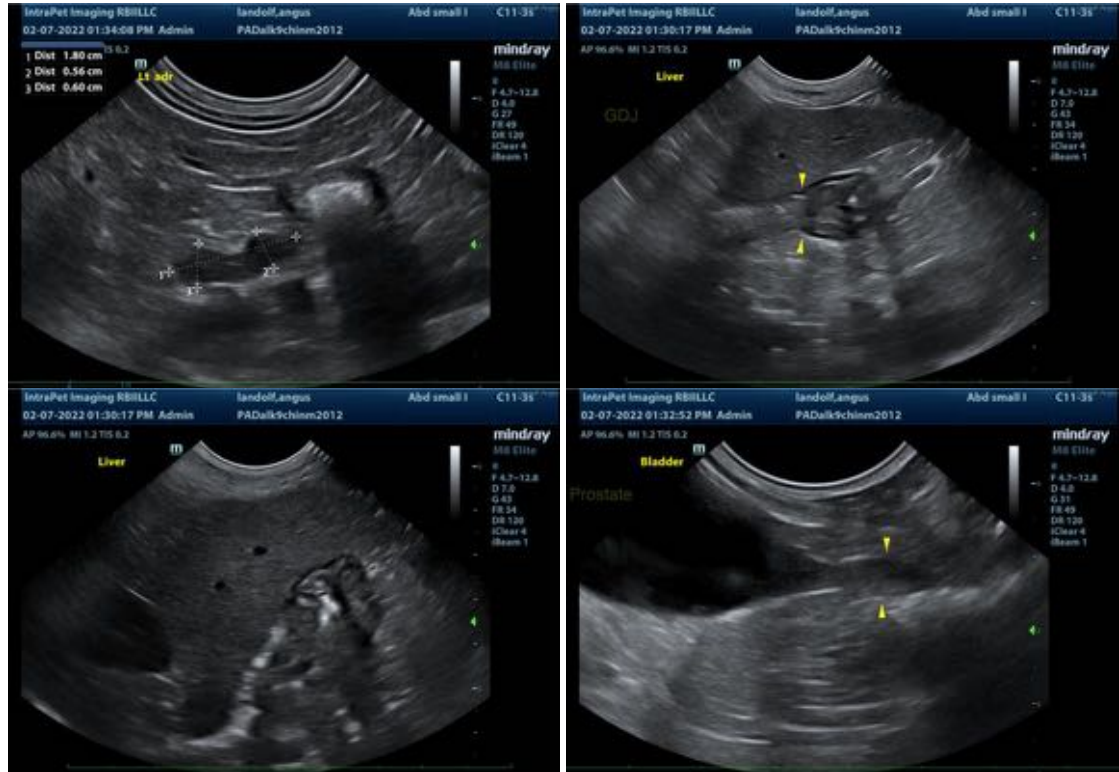
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The following diagnostics/treatment recommendations can be considered:

1. Serum cobalamin, folate, PLI and TLI
2. A fecal evaluation for ova/Giardia, if not already performed. Also consider prophylactic deworming with fenbendazole.
3. A 6-week limited antigen diet trial to assess for food allergies should be considered..
4. Consider a 4-week course of Tylosin as empirical treatment for small intestinal bacterial overgrowth.

5. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is  $< 2.0$  mcg/dL, an ACTH stimulation test is recommended.
6. Depending on the results of the above diagnostics/therapeutics, endoscopic or surgical gastrointestinal biopsies may be warranted.
7. Three-view thoracic radiographs should be performed prior to any anesthetic event.





**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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